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BRUHAT BANGALORE MAHANAGAR PALIKE (BBMP)

PROJECT:- -PROPOSED RENOVATION AND ADDITIONAL CONSTRUCTION OF RR NAGAR CONSTITUENCY MLA OFFICE, BBMP RR NAGAR DIVISION EXECUTIVE ENGINEER & YESHWANTPUR SUB DIVISION ASSISTANT EXECUTIVE ENGINEER OFFICE BEHIND CHOWDESHWARI BUS STOP, JP PARK, WARD NO-17

DETAILED ESTIMATE FOR PROPOSED AMPHI THEATER WITH IMMERSION TANK AT JP PARK

ESTIMATED COST RS.300.00 LAKHS

Sl No	Description of work	Unit	No N1	No N2	Dimensions L	Dimensions B	Dimensions D	Quantity	Rate in Rs.	Amount in Rs.
1	Earth work for lowering & levelling the ground other than foundation works by Mechanical means upto 3.0 mt depth including providing shoring stutting and bracing , removal of stumps and other and other deleterious matter, dressing of sides and bottom, filling back the excavated earth to the extent required and utilising /transporting the remaining earth upto 1.00km lead. including cost of labour, materials and HOM of machineries etc., complete.									
	(P.No.7, I.No.2.24 of PW,P & IWTD S.R 2016-17)									
	Surface excavation	Cum		1	40.00	25.000	0.150	150.00		
								150.00	**73.44**	**11016.00**
2	KSRB -2-2.1 : Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications.									
	(P.No.5, I.No.2.3 of PW,P & IWTD S.R 2016-17)									
	Stage & Green Room									
	Room Half Curve Walls	Cum		1	22.10	1.35	1.50	44.75		
	Stage			1	20.00	1.35	1.50	40.50		
	Main walk way curve - First			1	19.00	1.35	1.50	38.48		
	Main walk way curve - Third			2	40.00	1.35	1.50	162.00		
	For Foundation									
	Column C1			10	2.30	2.80	1.50	96.60		
	Column C2			12	2.70	3.10	1.50	150.66		
	Gallary									
	For Steps area footing - Raft			1	70.00	1.200	2.000	140.00		
	For Steps Inner Inclined column footings			9	2.40	11.000	2.000	43.20		
				1	38.00	1.200	2.000	76.00		
	Immersion Tank Excavation			1	150.00		1.000	150.00		
							Total	**942.19**	204.12	**192319.31**
3	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2									
	(KPWD SR 2016-17 - Item No. - 4.2, Page No. 12)									
	Stage & Green Room									
	Room Half Curve Walls	Cum		1	22.10	1.35	0.125	3.73		
	Stage			1	20.00	1.35	0.125	3.38		
	Main walk way curve - First			1	19.00	1.35	0.125	3.21		
	Main walk way curve - Third			2	40.00	1.35	0.125	13.50		
	For Foundation									
	Column C1			10	2.30	2.80	0.125	8.05		
	Column C2			12	2.70	3.10	0.125	12.56		
	Flooring									
	Green Rooms Area			1	65.00	--	0.125	8.13		
	Toilet Area			1	66.00	--	0.125	8.25		
	Store & Electrical room			1	20.00	--	0.125	2.50		
	Front lobby			1	86.65	--	0.125	10.83		
	Stage			1	93.00	--	0.125	11.63		
	Gallary									
	For Steps area footing - Raft			1.00	70.00	1.200	0.125	**10.50**		
	For Steps Inner Inclined column footings			13.00	2.40	1.200	0.125	**4.68**		
				1.00	38.00	1.200	0.125	**5.70**		
	Immersion Tank			1.00	150.00		0.125	**18.75**		

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								125.38		
						Total		125.40	5449.68	683389.87
4	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density. (P.No.148, I.No.19.6 of KPWD S.R 2016-17)									
	For All 4 Sides area taken by AutoCadd			1	330.65	1.00	0.75	247.99		
							Total	247.99		
							Say	248.00	326.16	80887.68
5	Providing & Constructing Granite/ trap/basalt size stone Masonary in basement with Cement morter 1:8 edges of stone chistle dressed in courses not less than 15 cms high, bond stones at two mtr apart in each course including cost of all materials, labour, curing complete as per specifications (P.No.23, I.No.5.1 of KPWD S.R 2016-17)									
	For Back Side area									
	Room Half Curve Walls	Cum		1	22.10	0.90	0.45	8.95		
				1	22.10	0.60	0.45	5.97		
				1	22.10	0.45	0.45	4.48		
	Stage			1	20.00	0.90	0.45	8.10		
				1	20.00	0.60	0.45	5.40		
				1	20.00	0.45	0.75	6.75		
	Main walk way curve - Third			1	40.00	0.90	0.45	16.20		
				1	40.00	0.60	0.45	10.80		
				1	40.00	0.45	0.45	8.10		
	Sides			2	12.00	0.60	0.45	6.48		
				2	12.00	0.45	0.45	4.86		
								86.08		
							Total	86.08	1883.52	162138.58
6	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2									
	(P.No.12, I.No.4.6 of PW,P & IWTD S.R 2016-17)									
	Openings	**Cum**								
	W			6	1.50	0.20	0.10	0.18		
	V			12	0.90	0.20	0.10	0.22		
	Terrace Water proof area			1	38.00	--	0.10	3.80		
							Total	4.20	5876.28	24656.87
7	Providing & laying IN POSITION REINFORCED CEMENT CONCRETE of design mix M25 with OPC cement @ 340 Kgs with down size graded grinite metel coarse aggregates @ 0.70 Cum & fine aggregates @ 0.47 Cum with super plastisiser @ 3.0 Ltrs confirming to IS 9103-1999, re affirmed - 2008, Maichine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation ,Plinth,& Ground floor Level for Roof Slab, Staircase, Lintels, Retaining Wall, Pires, Abutments, Pillers, Posts, Struts, Butteress, String or Lasing Corsess, Prapeets Copings, Bed Blocks, anchor blocks, plain windows cills, fillicts, etc including cost of all materials, laobur HOM of machinary, curing complete as per specification. -									
	(P.No.13, I.No.4.10 of PW,P & IWTD S.R 2016-17)									
	Ground floor	**Cum**								
	Footings									
	Column C1			10	2.00	2.50	0.45	22.50		
	Column C2			12	2.40	2.80	0.60	48.38		
	Raft for Gallary			1.00	70.00	1.20	0.45	37.80		
				9.00	2.40	11.00	0.60	142.56		
				1.00	38.00	1.20	0.60	27.36		
	Immersion tank (Average .375 thick)			1.00	150.00		0.38	56.25		
	Wall			1.00	42.00	0.23	2.00	19.32		
	Column									
	Column C1			10	0.20	0.38	3.30	2.51		
	Column C2			12	3.14	0.02	4.00	3.39		
	Column C3 - 3.5 mt high			6	0.45	0.45	3.50	4.25		
	Column C4 - 4.5 mt high			6	0.45	0.45	4.50	5.47		
	Column C5 -- 5.5 mt high			6	0.45	0.45	5.50	6.68		

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	Plinth Beams									
	For Rooms Area			1.00	65.00	0.20	0.38	4.94		
	For Toilet Area			1.00	45.00	0.20	0.38	3.42		
	For Toilet partition walls			1.00	50.00	0.15	0.38	2.85		
	Lintel									
	MD			1	2.70	0.20	0.15	0.08		
	D			6	1.30	0.20	0.15	0.23		
	D1			13	1.05	0.10	0.15	0.20		
	W			6	1.50	0.20	0.15	0.27		
	V			12	0.90	0.20	0.15	0.32		
	Roof Beams									
	For Rooms Area			1	65.00	0.20	0.30	3.90		
	For Toilet Area			1	45.00	0.20	0.30	2.70		
	All Over Tie Beam			1	75.00	0.20	0.30	4.50		
	Roof Slab									
	Main area			1	221.00	--	0.15	33.15		
	Lobby Projection			1	75.00	--	0.15	11.25		
	For Steps Footings									
	For Steps Inner Inclined column footings			13.00	2.40	1.500	0.300	14.04		
	0			1.00	37.00	1.200	0.300	13.32		
	RCC Wall @ first step									
	For Front walls RCC @ Starting step			1.00	37.00	0.300	1.200	13.32		
	Plinth Beams									
	Plinth Beams For Main steps curve			1.00	109.00	0.300	0.450	14.72		
	Plinth Beams For Main steps Inclined			9.00	9.50	0.300	0.450	11.54		
	Columns									
	For Back side curve wall columns			9.00	0.30	0.300	3.900	3.16		
	Inclined first row Columns			9.00	0.30	0.300	4.500	3.65		
	Inclined Second row Columns			9.00	0.30	0.300	5.500	4.46		
	Main Steps Beams									
	1st Row Steps curve beam			1.00	42.50	0.300	0.300	3.83		
	2nd Row Steps curve beam			1.00	48.00	0.300	0.300	4.32		
	3rd Row Steps curve beam			1.00	58.50	0.300	0.300	5.27		
	4th Row Steps curve beam			1.00	64.00	0.300	0.300	5.76		
	5h Row Steps curve beam			1.00	68.50	0.300	0.300	6.17		
	Inclined Roof Beams - Slope Beams			9.00	9.50	0.300	0.300	7.70		
	Inclined Roof @ steps - Curve Beams			1.00	71.00	0.300	0.300	6.39		
	Steps Slab									
	1st Row Steps curve Slab			1.00	42.50	1.500	0.150	9.56		
	2nd Row Steps curve Slab			1.00	48.00	1.500	0.150	10.80		
	3rd Row Steps curve Slab			1.00	58.50	1.500	0.150	13.16		
	4th Row Steps curve Slab			1.00	64.00	1.500	0.150	14.40		
	5th Row Steps curve Slab			1.00	68.50	1.500	0.150	15.41		
								625.26		
						Total		625.30	**6718.68**	**4201190.60**
8	Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for Foundation, footing , bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 -									
	(P.No.15, I.No.4.28 of PW,P & IWTD S.R 2016-17)									
	Footings	**Sqm**								
	Column C1			10	9.00	--	0.45	40.50		
	Column C2			12	10.40	--	0.60	74.88		
	For Footings									
	For Steps Inner Inclined column footings			13.00	7.80	--	0.300	30.420		
				1.00	76.40	--	0.300	22.920		
	Raft for Gallary			1.00	142.40	--	0.600	85.440		
				9.00	26.80	--	0.600	144.720		
				1.00	78.40	--	0.600	47.040		
	Immersion tank (Average .375 thick)			1.00	42.00		0.400	16.800		
								462.720		
						Total		462.70	**249.48**	**115434.40**

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9	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for columns, pillars,post and struts, circular or curved in plan including cost of all materials, labour complete as per specifications. (P.No.16, I.No.4.32 of PW,P & IWTD S.R 2016-17)									
	Ground Floor									
	Column C1			10	1.16	--	3.30	38.28		
	Column C2			12	0.94	--	3.00	47.31		
	Gallary									
	For Back side curve wall columns			9	1.20	--	3.900	42.12		
	Inclined first row Columns			9	1.20	--	4.500	48.60		
	Inclined Second row Columns			9	1.20	--	5.500	59.40		
							Total	**235.71**		
								235.70	**395.28**	**93167.50**
10	Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for sides & soffits of beams, beam hauncing cantilever girders, bressumers & lintels & not exceeding 1.0 in depth including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 - (P.No.16, I.No.4.34 of PW,P & IWTD S.R2016-17)									
	Ground Floor	**Sqm**								
	Lintel									
	MD			2	2.55	--	0.15	0.77		
	Base			1	2.25		0.20	0.45		
	D			12	1.15	--	0.15	2.07		
	Base			6	0.85		0.20	1.02		
	D1			26	0.90	--	0.15	3.51		
	Base			13	0.60		0.10	0.78		
	W			12	1.35	--	0.15	2.43		
	Base			6	1.05		0.20	1.26		
	V			24	0.75	--	0.15	2.70		
	Base			12	0.45		0.20	1.08		
	Plinth Beams									
	For Rooms Area			2	65.00	--	0.38	49.40		
	For Toilet Area			2	45.00	--	0.38	34.20		
	For Toilet partition walls			2	50.00	--	0.38	38.00		
	Roof Beams									
	For Rooms Area			2	65.00	--	0.30	39.00		
	For Toilet Area			2	45.00	--	0.30	27.00		
	All Over Tie Beam			2	75.00	--	0.30	45.00		
	Plinth Beams	**Sqm**								
	Plinth Beams For Main steps curve			2	109		0.450	98.10		
	Base			1	109	0.300		32.70		
	Plinth Beams For Main steps Inclined			18	9.5		0.450	76.95		
	Base			9	9.5	0.300		25.65		
	Main Steps Beams									
	1st Row Steps curve beam			2	42.5		0.300	25.50		
	Base			1	42.5	0.300		12.75		
	2nd Row Steps curve beam			2	48		0.300	28.80		
	Base			1	48	0.300		14.40		
	3rd Row Steps curve beam			2	58.5		0.300	35.10		
	Base			1	58.5	0.300		17.55		
	4th Row Steps curve beam			2	64		0.300	38.40		
	Base			1	64	0.300		19.20		
	5h Row Steps curve beam			2	68.5		0.300	41.10		
	Base			1	68.5	0.300		20.55		
	Inclined Roof Beams - Slope Beams			18	9.5		0.300	51.30		
	Base			9	9.5	0.300		25.65		
	Inclined Roof @ steps - Curve Beams			2	71		0.300	42.60		
	Base			1	71	0.300		21.30		
								876.27		
							Total	876.30	**276.48**	**242279.42**
11	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sloping or battering surface including folded plates where inclination to horizontal plane does not exceed 30 degree requiring shuttering only on the under side including cost of all materials, labour complete as per specifications. - (P.No.16, I.No.4.41 of KPWD S.R 2016-17)									
	Ground Floor	**Sqm**								
	Main area			1	221.00	--	1.00	221.00		
	Lobby Projection			1	75.00	--	1.00	75.00		
	Gallary									
	Steps Slab									

	1st Row Steps curve Slab			1	42.50	--	1.500	63.75		
	Side			1	42.50	--	0.200	8.50		
	2nd Row Steps curve Slab			1	48.00	--	1.500	72.00		
	Side			1	48.00	--	0.200	9.60		
	3rd Row Steps curve Slab			1	58.50	--	1.500	87.75		
	Side			1	58.50	--	0.200	11.70		
	4th Row Steps curve Slab			1	64.00	--	1.500	96.00		
	Side			1	64.00	--	0.200	12.80		
	5th Row Steps curve Slab			1	68.50	--	1.500	102.75		
	Side			1	68.50	--	0.200	13.70		
							Total	**774.55**	**455.76**	**353008.91**
12	Providing TMT Steel reinforcement for RCC works including straightening, cutting, bending, hooking, placing in position lapping and / or welding wherever required, tieng with binding wire and anchoring to the adjoining members wherever necessary, complete as per design (laps, hooks and wastage shall not be measured and paid) cost of all materials, labour, HOM of machineries etc., complete as per specifications. Specification No.KBS 4.6.3. FOR TMT Bars Fe- 500 - (P.No.17&18 I.No.4.46.2 of KPWD S.R 2016-17)									
	Ground floor	**Tonne**								
	For Footings				334.85		70.00	23439.78		
	For Plinth Beams						150.00	5619.50		
	For Columns			--	--	--	200.00	4460.68		
	Tank Wall						150.00	2898.00		
	For Beams & Lintels			--	--	--	150.00	9005.06		
	For Slabs			--	--	--	70.00	7858.00		
							Total	**53.28**		
							Say	**53.30**	**65455.56**	**3488781.35**
13	KSRB 5-15 : Providing and constructing load bearing wall with cement concrete solid blocks having block density not less than 1800 kg/m3 having a min average compressive strength of 5.0 N/ mm2 conforming to I.S. 2185(part 1): 2005 & construct with C M 1: 4 as per IS 2572: 2005 including cost of materials, labour charges, scaffolding, curing complete as per specification. - solid concrete block size 400x200 x 200 mm									
	(P.No.25, I.No.5.27.1 of KPWD S.R 2016-17)	**Sqm**								
	Main Rooms Walls			1	64.40	--	2.85	183.54		
	Toilet Room Walls			1	42.50	--	2.85	121.13		
	For Steps Qty			1	75.00	--	1.00	75.00		
								379.67		
	Deductions									
	MD			1	2.40	--	2.85	6.84		
	CG			1	2.40	--	2.85	6.84		
	D			6	1.00	--	2.10	12.60		
	W			6	1.20	--	1.20	8.64		
	V			12	0.60	--	0.60	4.32		
								39.24		
								340.43		
								340.40	**1011.96**	**344471.18**
14	Providing & constructing non load bearing walls with **solid concrete blocks** of size 400x100x200 having block density not less than 1800 Kg /m3 having a min average compressive strength not less than 4.0 N/ mm2 confirming to I.S. : 2185 (part 1) 2005 & constructed with C M 1: 4 C M 1: 4 as per IS 2572: 2005 including cost of materials, labour charges, scaffolding, curing complete as per specification.									
	(P.No.25, I.No.5.28 of KPWD S.R 2016-17)	**Sqm**								
	Partition walls			1	50.00	--	2.85	142.50		
	Deductions									
	D1			13	0.75	--	2.10	20.48		
	Open			6	0.75	--	3.30	14.85		
								35.33		
								107.18		
								107.20	**773.28**	**82895.62**
15	Providing 12mm thick cement plaster in single coat with cement mortor 1:3, to ceiling including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications - (P.No. 114 & 115 I.No.15.21 & 15.33 of PW,P & IWTD S.R2016-17)									
	Ground floor	Sqmt								
	Main area			1	221.00	--	1.00	221.00		
	Lobby Projection			1	75.00	--	1.00	75.00		
							Total	**296.00**	**235.44**	**69690.24**

16	Providing 18mm thick cement plaster in single coat with cement mortor 1:3 to Brick masonary including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.- External Plastering (P.No.113, I.No.15.15 of PW,P & IWTD S.R 2016-17)									
	For External Room Walls			1	50.00	--	3.30	165.00		
	For Toilet Room Walls			1	37.50	--	3.30	123.75		
	Miscellaneous works			1	15.00	--	3.30	49.50		
								338.25		
	Deductions									
	MD		0.5	1.00	2.40	--	2.85	3.42		
	CG		0.5	1.00	2.40	--	2.85	3.42		
	D		0.5	6.00	1.00		2.10	6.3		
	W		0.5	6.00	1.20		1.20	4.32		
	V		0.5	12.00	0.60		0.60	2.16		
								19.62		
								318.63		
								318.60	**263.52**	**83957.47**
17	Providing **18mm** thick cement plaster in single coat with cement mortor **1:4, to brick masonry** including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.(**internal)** Providing floating coat of cement plastering finishing smooth including cost of materials, labour, curing complete as per specifications									
	(P.No.114 & 115 ,& I.No.15.16 &15.32 of KPWD S.R 2016-17)	Sqmt								
	For Room-1			2	21.00	--	3.15	132.30		
	For Room-2			2	12.50	--	3.15	78.75		
	Att Toilets			2	4.85	--	3.15	30.56		
	Lobby			1	9.50	--	3.15	29.93		
	Both toilet lobby walls			2	21.50	--	3.15	135.45		
	Baths & Toilets			8	6.00	--	3.15	151.20		
	Extra for columns			1	100.00	--	1.00	100.00		
								658.18		
	Deductions									
	MD		0.5	1.00	2.40	--	2.85	3.42		
	CG		0.5	1.00	2.40	--	2.85	3.42		
	D		0.5	6.00	1.00	--	2.10	6.3		
	D1		0.5	13.00	0.75	--	2.10	10.2375		
	Open		0.5	6.00	0.75	--	3.30	7.425		
	W		0.5	6.00	1.20	--	1.20	4.32		
	V		0.5	12.00	0.60	--	0.60	2.16		
								37.28		
								620.90	**265.68**	**164960.05**
11	Providing **20mm thick cement plaster** in single coat with cement **mortor 1:3**, to Stone masonary & concrete Surface including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.									
	(P.No. 114 , I.No.15.18 of PW,P & IWTD S.R 2016-17)									
	#REF!	**Sqm**								
				1.00	70.00		3.000	210.00		
				2.00	10.00		1.500	30.00		
	For Back side curve wall columns			9	1.20	--	2.550	27.54		
	Inclined first row Columns			9	1.20	--	1.350	14.58		
	Inclined Second row Columns			9	1.20	--	0.900	9.72		
								291.84		
							Say	**291.90**	**279.72**	**81650.27**
18	KSRB 15-15.1 : Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete asper specifications. - do- with primer- INSIDE-Ground floor - (P.No.117, I.No.15.51.2. of PW,P & IWTD S.R 2016-17) - INSIDE									
	Ground floor	**Sqmtr**								
	Same as Interna Wall qty							620.90		
	Deduction of Cladding qty							-98.58		
								522.32		
							Say	**522.40**	**97.20**	**50777.28**
19	KSRB 15.14.1 : Providing and applying two coats with oil bound washable distemper of approved brand and shade on Ceiling surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. (P.No.117, I.No.15.49.1 & 15.50.2 of PW,P & IWTD S.R 2016-17) INSIDE CEILING.									

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	Ground floor	**Sqm**						296.00		
	Slab Area						Total	**296.00**	**101.52**	**30049.92**
20	Providing & finishing external walls in two coats over one coat of 100 % acrylic silcon glazed primer with Antifungal paint for top coat of Approved brand and shade to give an even shade after thourghly brooming the surfacfe to remove all dirt and loose powdered material, free from morter drops and and other foreign matter , cost of materails , labour, complete as per specifications (P.No.125, I.No.15.104 of PW,P & IWTD S.R 2016-17)									
								318.63		
	External Walls	**Sqm**					Total	**318.63**		
							Say	**318.70**	**163.08**	**51973.60**
20	Providing & applying Two coats of wall putty to inside plasterd walls and ceiling using white cement putty. Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers, including cost of materials , cost of labour and scafolding etc complete as per specifications.(P.No.126, I.No.15.106 of PW,P & IWTD S.R 2016-17)									
	Same as internal Plastering qty vide item no 29 & 30	**Sqm**						**818.3175**		
							Say	**818.40**	**60.48**	**49496.83**
21	Providing whitr Sal wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, HOM of machineries complete as per specifications. .									
	(PWD SR 2016-17 Page No. 51 It.No 9.13.1)	**Cum**								
	MD			1.00	11.10	0.125	0.15	0.21		
	D			6.00	6.80	0.125	0.15	0.77		
								0.97		
							Say	1.00	**69034.68**	**69034.68**
22	Providing and fixing flush door shutter made out of solid core black board type, well seasoned chemically treated hard wood battens and internal frame with minimum 45 mm wide wooden frame all-round do - 35mm thick One Side Teak & one side commercial									
	(PWD SR 2016-17 Page No. 64 It.No 9.106.5)	**Sqmtr**								
	MD			1	2.4	--	2.85	6.84		
	D			6.00	1.00	--	2.10	12.60		
								19.44		
							Say	19.50	**3313.44**	**64612.08**
23	Providing & fixing 30mm thick factory made rigid foam Panelled Door Shutters made from M.S. tube of 19 gauge thickness, size 19 x 19mm for styles and 15 x 15mm for top and bottom rails, covered with heat moulded PVC channel of 5mm thick sheet & 30 x 50mm wide to form styles & 5mm thick & 75mm wide PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm thick 20mm wide PVC sheet as gap insert for top rail & bottom rail, Panelling of 5mm thick PVC sheet fitted in the M.S. Frame, Sealed to the styles & rails with 5 x 30mm PVC sheet beading on either side & joined together with solvent cement adhesive etc., Complete as per manufacturers specification & direction of Engineer-in-charge fixed to frames with 3 nos of 75 mm Aluminium hinges. (KPWD SR 2016-17 - Item No. - 9.83, Page No. 59)									
	Toilet Doors	**Sqmtr**		12	0.75	--	2.10	18.90		
								18.90	**3456.00**	**65318.40**
24	Providing and fixing PVC Hollow Door Frame of the size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet, mitre cut at two corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. Square tube. The two vertical door profiles are to be reinforced with 19x19 mm M.S. Square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door screws through the frame by using PVC fasteners. A minimum of 4 Nos of screws to be provided for each vertical member & minimum 2 Nos. for horizontal member. (KPWD SR 2016-17 - Item No. - 9.92, Page No. 59)									
	Toilet Doors	**Rmt**		12	5.70	--	1.00	68.40	421.20	28810.08

25	KSRB 7.11 : Providing and fixing in position aluminium windows and ventilators as per approved drawings with sliding shutters using three track window frame of size 92x31.75mm bottom section 1.3mm thick, weight 1.07kg/m; sides and top sections 1.3 mm, thick, weight 0.933 kg/m.shutter frame section comprising top and bottom section of size 40mmx18mm, wall thickness 1.25mm. weight 0.417 kg./m. shutter side outer 40mmx18mm. wall thickness 1.25mm. weight 0.417 kg/m, shutter interlock section 40mmx26.7mm wall thickness 1.1 mm. thick, weight 0.469 kg/m, the shutters mounted on nylon rollers with approved quality of fixtures such as aluminium handles tower bolts etc.; providing and fixing 5.5mm. thick plain glass for shutters fitted with rubber beading all aluminium sections including cutting to required length, joints mitred subdividing the frame tenonned and rivetted, in the assembled frame, stiffened with end clips for corners, angles etc., and fixed to the walls, lintels, floor beams/cills as the case may be, with necessary steel screws, raul plugs or teak wood gatties including cutting masonry or concrete and making good the original surface using cement mortar. using aluminium section anodized to 12 - 15 microns. (BSCR 2016-17 - Item No. - 7.11.1, Page No. 33)									
	W	Sqmt		6.00	1.20	--	1.20	8.64		
	V	Sqmt		12.00	0.60	--	0.60	4.32		
								12.96		
							Say	13.00	4418.28	57437.64
26	Providing and fixing M.S.grill work for windows and ventilators weighing 21kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications. Specification No. KBS 7.12 (BSCR 2016-17 - Item No. - 7.9 Page No. 32)									
	V	Kgs		1	12.96	--	21.00	272.16		
								272.16		
							Say	272.20	84.24	22930.13
27	Providing vitrified tiles 60´x60cms of approved make, shade and size for flooring laid on a bed of 12mm thick cement mortar 1:3 mix, flush pointing with white cemnt using colour pigment, including cost of materials, labour, curing complete as per specification (BSCR 2016-17 - Item No. - 14.45 Page No. 107)									
	For Room-1	Sqmtr		2	15.75	--	1.00	31.50		
	For Room-2			2	12.50	--	1.00	25.00		
	Lobby			1	5.00	--	1.00	5.00		
	Toilet Lobby			2	14.00	--	1.00	28.00		
	Wall cladding			1	10.00		1.75	17.50		
								107.00	1200.96	128502.72
28	Providing Ceramic tiles of approved make,shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing with white cement using colour pigment , including cost of materials, labour, curing, complete as per specifications for Ceramic Tiles of size 30x30cms 6mm thick (BSCR 2016-17 - Item No. - 14.36.2 Page No. 105&106)									
	Ground floor	Sqmt								
	For Room-1			1	32.50	--	1.00	32.50		
	Att Toilets			1	32.50	--	1.00	32.50		
								65.00	1270.08	82555.20
29	Providing skirting, dadoing, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications Colour glazed tiles 30x45 cms 6mm thick with border of size 30 x 10 cms.									
	(P.No.107 I.No.14.41.3 of PW,P & IWTD S.R 2016-17)									
	Slab Area	Sqmt								
	Attah Toilets			2	5.00	--	2.10	21.00		
	Bath / WC'S			8	6.00	--	2.10	100.80		
								121.80		
	Deductions									
	Toilet Doors			12	0.75	--	2.1	18.90		
	V			12	0.6	--	0.6	4.32		
								23.22		
								98.58		
							Say	100.00	1208.52	120852.00
30	Providing and laying pattern flooring for staircase treads and risers using the combiantion of 20mm thick **ruby red granite** @ 66%,20 mm thick grey granite @ 20%, 20mm thick Shiva gold granite 7%, 20mm thick black granite 7%. The granite meterials are laid on existing bed of CM 1:3 20mm thick pointed with colour pigment, including full rounding for nosing, flaming the ruby red granite for 50 mm wide curing etc., complete									
	(P.No.107 I.No.14.46 of PW,P & IWTD S.R 2016-17)	Sqm								
	For Stage Entry Steps									
	Tread		2	5	4.75		0.300	14.25		

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	Riser		2	6	4.75		0.15	8.55		
	For Stage Entry Back Steps									
	Tread		2	5	2.00		0.30	6.00		
	Riser		2	6	2.00		0.15	3.60		
	Entrance Lobby Steps									
	Tread		2	7	1.00		0.30	4.20		
	Riser		2	8	1.00		0.15	2.40		
								39.00	6181.92	241094.88
31	Providing and fixing Stainless steel 304 Grade for staircase railing, Balconys Ramps with hand rails 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges etc., complete as per specification (P.No.43 I.No.7.38 of PW,P & IWTD S.R 2016-17)									
	For Steps & Stage	Sqmtr		1	15.00	--	1.10	16.50		
	For Staircase			2	9.00	--	1.100	19.80		
	For Ramp			1	6.00		1.100	6.60		
						Total		42.90	6638.76	284802.80
32	Providing and fixing in position collapsible steel shutters with single or double leaf with vertical channel 20mmx10mmx2mm braced with flat iron diagonals 20mmx5mm size, with top and bottom rails of T iron sections of 40x40x6 mm with 38mm dia steel pulleys complete with bolt and nuts, locking arrangements, stoppers, handles on both sides with 7.5cms openings at 10 cms. c to c applying a priming coat of red lead paint. cost of materials, labour, HOM of machinery complete as per specifications. (I.No.7.1 Page No 31 of PW,P & IWTD S.R 2016-17)									
	For Both side entry gates	Sqmt		2	2.40	--	2.85	13.68		
								13.68		
								13.70	4355.64	59672.27
	PLUMBING & SANITARY WORKS									
	INTERNAL SANITARY FIXTURES									
1	KSRB 11-5 : Providing and fixing white vitreous china clay, water closet European type (Pedestal type, P-trap) with black solid plastic seat and lid, C.P brass hinges, rubber buffers. 10 litre low level, P.V.C flushing cistern (all are approved make) with fittings, C.I / M.S brackets, 40mm diameter flush bend with fittings and clamps, overflow arrangements with special and 25mm mosquito proof coupling of approved design; painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11									
	(PW,P&IPTD S ZONE 2016-17 - I No. - 12.5, Page No. 77)	Each		1	3.00	--	--	3.00	5540.40	16,621.20
2	KSRB 11-4 : Providing and fixing white vitreous china clay, water closet Orissa pattern of size 580 x 440mm with integral type footrests, 100mm S or P trap, (approved make) cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11									
	(PW,P&IPTD S ZONE 2016-17 - I No. - 12.2, Page No. 77)	Each		1	3.00	--	--	3.00	4682.88	14,048.64
3	KSRB 11-11.1 : Providing and fixing white vitreous china clay, flat back wash basin size 630x450mm with a pair of 15mm C.P brass pillar taps with C.I / M.S brackets, 32 mm C.P. brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11									
	(P.No.80, I.No.12.23 of PW, P& IWTD SR 2016-17)	Nos		1	10			10.00	4196.88	41968.80
4	Providing pedestal for wash basin of approved 1st quality and make conforming to ISI Specifications and fixing for low down cistern as directed .Rate includes cost of materials and conveyance to work spot.									
	(P.No.87, I.No.12.108 of PW, P& IWTD SR 2016-17)	Nos		1	10			10.00	945.00	9450.00
1	KSRB 11-8.1 : Providing and fixing white vitreous china clay, wall corner type, lipped front urinal basin of size 340x410x265mm with 5 litres P.V.C automatic flushing cistern, C.I / M.S brackets, standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications.									
	(P.No.88, I.No.12.110 of PW, P& IWTD SR 2016-17)	Each		1	5			5.00	3,204.36	16021.80
	Market Rate									

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2	Providing fixing C.P brass towel rail 600mm length, 20mm dia with C.P brackets,fixed to wooden cleats with C.P brass screws including cost of materials,labour complete as per specifications. Make: Jaquar, Range-continental , Model No-1121									
	(P.No.83, I.No.12.46 of PW, P& IWTD SR 2016-17)	Unit		1	10			10.00	766.80	7668.00
3	KSRB 11-15.1 : Providing and fixing 600x450mm bevellead edge mirror of superior glass with 6mm hard board backing and fixed to wooden cleats with C.P screws, washers, including cost of materials, labour complete as per specifications.									
	(P.No.82, I.No.12.39 of PW, P& IWTD SR 2016-17)	Unit		1	6			6.00	1351.08	8106.48
4	Supply, fixing, testing and commissioning of 20 mm CP brass bib cock with wall flange and suitable length extension pipe etc,. complete as per specification.									
	(P.No.91, I.No.13.24 of PW, P& IWTD SR 2016-17)	Nos		1	10			10.00	262.44	2624.40
5	Providing and fixing in position brass stop cock of approved quality 20 mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. etc,. ,. complete as per specification.									
	(P.No.91, I.No.13.27 of PW, P& IWTD SR 2016-17)	Nos		1	5			5.00	172.80	864.00
6	Providing and fixing CI Nahani trap of approved make conforming to ISI specifications and construction of Cistern in M-15 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot). - 10cms x 7.5cms									
	(P.No.88, I.No.12.113.1 of PW, P& IWTD SR 2016-17)	Nos		1	10			10.00	270.00	2700.00
7	KSRB 2-2.1: Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m.after breaking of clods complete as per specification. Specification. No.KBS 2.1(a)/2.3.5									
	(P.No.5, I.No.2.3 of PW, P& IWTD SR 2016-17)									
	Qty Include All Plumbing Related Works	Cum		1	50	0.6	0.600	18	204.12	3674.16
8	Providing & fixing Chorinated Poly Venyl Chloride **(CPVC)** 20 mm dia pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and cost of cutting chases and making good the same including testing of joints complete. **(concealed work including cutting chases and good the walls etc.)**									
	(P.No.96, I.No.13.86.2 of PW, P& IWTD SR 2016-17)									
a	20mm dia (-do- with I.No. 13.86.2)	Rmt.		5	15			75.00	226.80	17010.00
	Internal plumbing Qty (Conceiled in wall)									
9	Providing and fixing chorinated poly venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (External work)									
	(P.No.97, I.No.13.87.2, & 3 of PW, P& IWTD SR 2016-17)									
a	20mm dia	Rmt.		1	100			100.00	135.00	13500.00
b	25mm dia (-do- with I.No. 13.87.3)	Rmt.		1	161			160.00	178.20	28512.00
c	32mm dia (-do- with I.No. 13.87.4)	Rmt.		1	90			90.00	232.20	20898.00
10	KSRB13-6.3-7: Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 32mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3									
	(P.No.92, I.No.13.35 of PW, P& IWTD SR 2016-17)									
a	-do'- with 32 mm dia (Screwed ends)	Nos.		1	2			2.00	1050.84	2101.68
11	KSRB13-6.4-2 : Providing and fixing in position brass ball valve high or low pressure with plastic float of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS									
a	20mm dia nominal	Nos.		1	2			2.00	442.80	885.60

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b	25mm dia nominal	Nos.		1	2			2.00	654.48	1308.96
	(P.No.92, I.No.13.41 & 42 of PW, P& IWTD SR 2016-17)									
	OVER HEAD TANK ACCESSORIE									
12	Supplying **water storage tanks made of virgin polymer (LLDPE)** with two layers outer Black or Blue and inner White layer of approved quality and make, conforming to I.S.I./ISO/SSI specifications.									
	(P.No.265, I.No.37.58 of PW, P& IWTD SR 2016-17)	litres		1	2000			2000.00	6.48	12960.00
	INTERNAL SANITARY SYSTEM									
	SOIL VENT AND RAIN WATER PIPES									
13	Providing and fixing to wall, ceiling and floor unplasticised 110 mm dia PVC Pipes of 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications									
	(P.No.88, I.No.12.116.1 of PW, P&IWTD SR 2016-17)									
a	110 mm dia From Kitchen to IC	Rmt		1	20			20.00		
b	110 mm dia Rain water pipes			4	10			40.00		
								60.00	444.96	26697.60
14	Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials,with 110mm outer dia									
	(P.No.93, I.No.13.70.3 of PW, P&IWTD SR 2016-17)									
b	110 mm dia for sewer line	Rmt		1	40			40	326.16	13046.40
15	KSRB 12-8.1 : Constructing brick masonry inspection chamber 600 x 600mm, and 450mm depth, (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 600 x 600mm (PWD SR2011-12 P.No.74/11.50.1)									
	(P.No.73, I.No. 11.50.1 of PW, P& IWTD SR 2016-17)	each								
	IC for Sewage			1	3			3	9670.32	29010.96
										12173494.51
									TOTAL	12173494.50
							Grand total			**12173494.50**

CERTIFICATE

1. Certified that this estimate is prepared based on KPWD SR of Bangalore Circle for the year 2016-17 & ESR 2014-15 for most Economical & safe way of executing the work as per the design and drawings, Quantities & Estimates submitted by the Architect
2. Certificate that, the work spot has been inspected by me & prepared the estimate in most economical way of Excuting the work
3. The above work is included in

Asst. Engineer	Asst Executive Engineer	Executive Engineer
BBMP	BBMP	BBMP